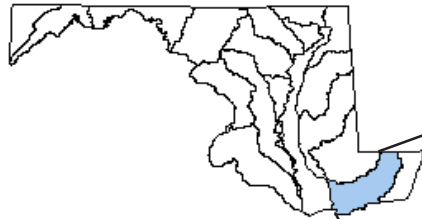




# Pocomoke River Basin

## Current Status of Wadeable Streams

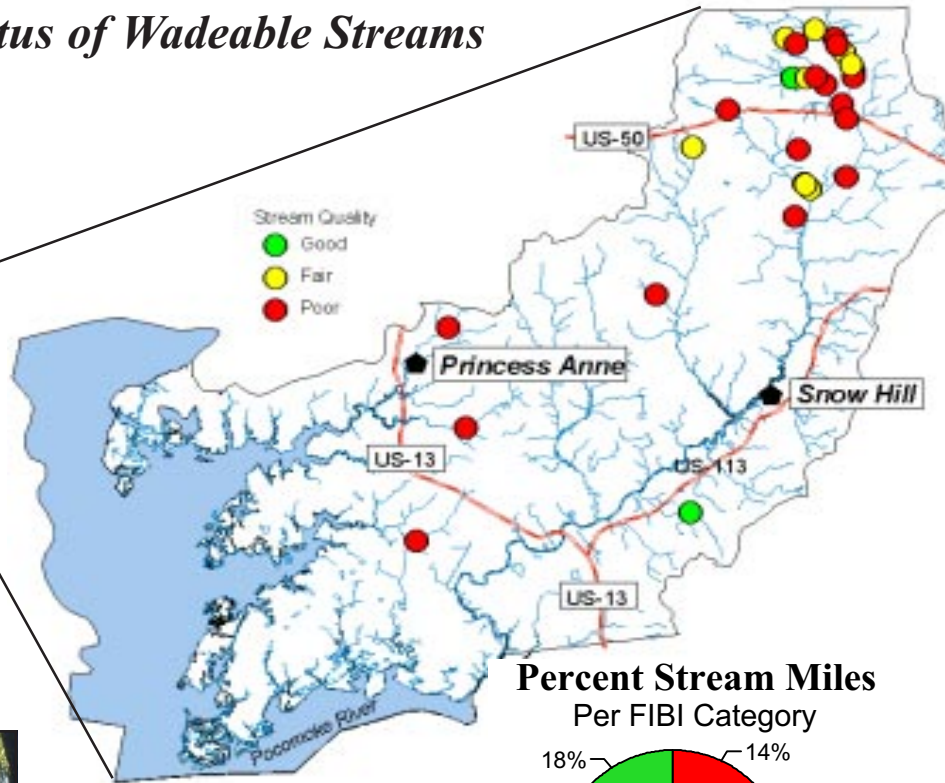


### Where is the Pocomoke River basin?

The Pocomoke River basin is located in portions of Wicomico, Worcester, and Somerset counties, Maryland. This basin includes three major rivers, the Pocomoke, the Big Annemessex and the Manokin, as well as Nassawango and Dividing Creeks.

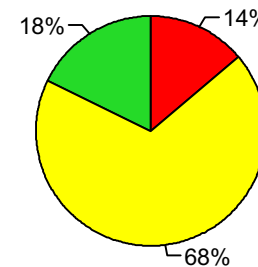


Nassawango Creek is representative of the slow-moving and tea-colored streams found in the Pocomoke River basin.



The Fish Index of Biotic Integrity or FIBI is a measurement of stream quality based on fish communities.

### Percent Stream Miles Per FIBI Category

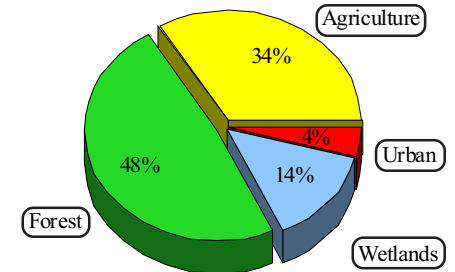


### What Lives in Our Streams? \*

Estimated Fish Abundance:	2.9 million
Number of Fish Species:	32
Number of Gamefish Species:	2
Number of Reptile and Amphibian Species:	12
Number of Freshwater Mussel Species:	3

\*Based on the Maryland Biological Stream Survey collections in wadeable streams basin-wide in 1997.

## Land Use in the Basin



Nearly half of the land use in the Pocomoke River basin is forested. The basin covers an area of 813 square miles, with a population density of 78 people per square mile. Agriculture activities, such as the poultry and livestock industries, are commercially dominant in the basin. The population has increased 7% over the past 20 years.



### Water Quality



**Oxygen** - 71% of the streams had oxygen levels above the state water quality standard of 5 mg/L.



**Nitrate** - 60% of the streams had nitrate levels (>1 mg/L) that may affect aquatic life. The main sources of nitrates in small streams are fertilizers and acid rain.



**Buffering Capacity** - Only 34% of the streams are well buffered against acid rain.



Good



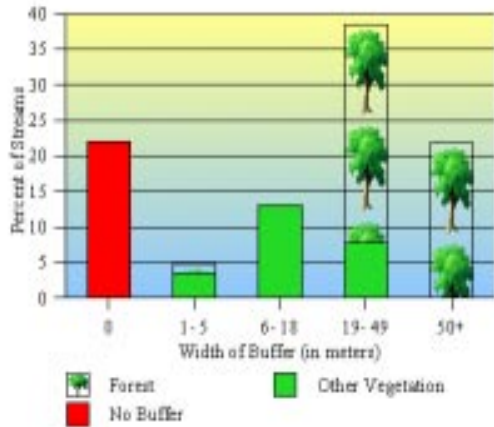
Fair



Poor

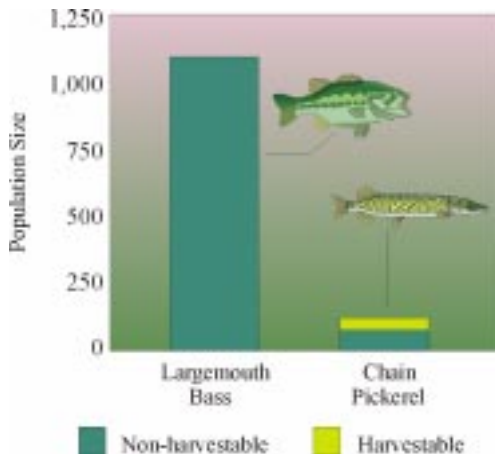
## Riparian Zone

Trees, shrubs, and grasses that border a stream are called the stream's *riparian buffer*. This buffer zone can protect a stream against runoff, provides shade, stabilizes stream banks, and supplies food and shelter for aquatic life. A wide and intact buffer offers more protection than a narrow one. The riparian buffers in the Pocomoke basin are in fairly good condition. We can help maintain these buffers by protecting streamside forests and planting trees in disturbed areas.



## Gamefish

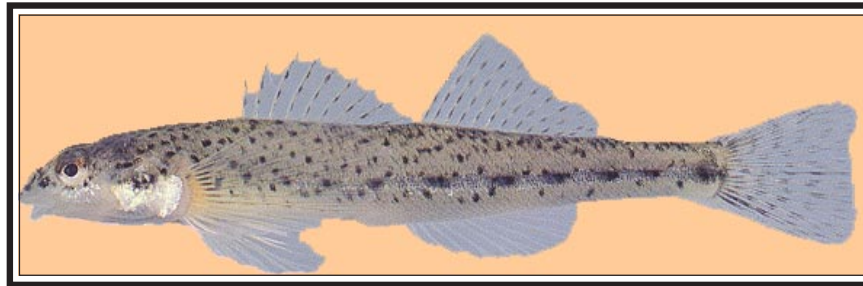
Two species of gamefish were found in the basin. Most of the individuals were not of a harvestable size, but it does appear that the wadeable tributary streams in the Pocomoke River basin serve as a nursery for gamefish.



## Did You Know???



- The Pocomoke River basin contains 2,700 acres of land considered to be of exceptional ecological importance.
- The basin is unique in Maryland because of its tea-colored, tannic water, stands of bald cypress, extensive wetlands, and unusual flora and fauna.
- The basin has been described as having one of the best environments for bird life on the Atlantic Coast.
- Of all the basins in Maryland, the Pocomoke River basin has the lowest maximum elevation of 85 feet above sea level.



*The glassy darter, rare in Maryland, is found in the Pocomoke River basin.*

## Community Involvement

Want to help? These community groups can show you how!

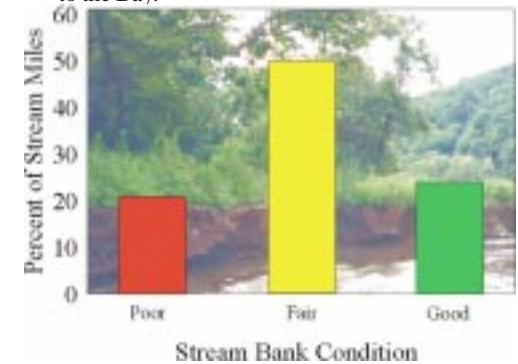
Alliance for the Chesapeake Bay  
6600 York Road, Suite 100  
Baltimore, MD 21212  
Kathleen Millan (410) 377-6270

Nassawango Creek Preserve  
Stewardship Committee  
110 West Federal Street  
Snow Hill, MD 21863  
Ilia Fehrer (410) 632-2640



## Stream Bank Stability

Eroded, unstable banks reduce habitat quality and contribute to water quality problems in downstream areas. The stability of stream banks in the Pocomoke basin is good. Most streams within the basin have banks that are moderately resistant to erosion. However, in some areas, soil erosion and storm water runoff from agricultural lands has increased bank erosion. Since streams in this basin flow into the Chesapeake Bay, this bank instability causes an increase in downstream transport of nutrients and suspended sediments to the Bay.



## Recreation

The basin provides numerous parks, forests, and recreational areas for residents and visitors. Activities include hiking, fishing, trapping, picnicking, canoeing, camping, swimming, boating, hunting, nature studies, and off-road vehicle trails.



*A canoe race on the Pocomoke River at Byrd Park in Snowhill, Worcester County.*

For more detailed information on streams in the Pocomoke basin and elsewhere in Maryland, contact Ann Smith of DNR/MANTA at (410) 260-8610 or email at [asmith@dnr.state.us](mailto:asmith@dnr.state.us), or check out the DNR web site at [www.dnr.state.md.us/Bays/waterqual/mbss/mbss.html](http://www.dnr.state.md.us/Bays/waterqual/mbss/mbss.html).